

**REMARKS**

Claims 1-6 and 8-41 are pending. Claims 1-6 and 8-41 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,239,542 to Breidenstein et al. in view of U.S. Patent No. 6,327,508 to Mergard and U.S. Patent No. 5,544,236 to Andruska et al.

Reconsideration is requested. No new matter is added. Claims 1, 12-16, and 22-27 are amended. The rejections are traversed. Claims 1-6 and 8-41 remain in the case for consideration.

**INTERVIEW SUMMARY**

On March 9, 2005, the undersigned held a telephonic interview with Examiner Agdeppa. All the claims were discussed, with specific reference to claim 1. During the interview, the undersigned argued that Andruska specifically limits its application to calling features that are not administered by the telephone company, as mentioned in column 3, lines 13-15. As signaling would not be a feature that a customer could control, it would not be a feature to which Andruska would be applicable. The undersigned further argued that the combination of Mergard and Andruska was not obvious, since Mergard teaches a hardware element, and modification of this hardware element to support the teaching of Andruska would require undue experimentation. The Examiner agreed that Andruska appeared to limit its application so that Andruska would not apply to embodiments of the claimed invention, but requested an opportunity to discuss the undersigned's arguments with his supervisor, and would consider the argument about the combination of Mergard and Andruska.

The undersigned and the Examiner also discussed how the claims might be amended to make them allowable. The undersigned pointed out that the claims are directed to line signaling, as discussed with reference to claim 1. Although no amendment was specifically discussed, the undersigned suggested that perhaps the claims could be clarified to further emphasize their application to line signaling. The Examiner indicated that such amendment would probably not suffice.

**REJECTIONS UNDER 35 U.S.C. § 103(a)**

Referring to claim 1, the invention is directed toward a network processing device, comprising: a memory for storing a dynamically configurable set of signaling templates; a first trunk controller for receiving and transmitting first line signaling; a second trunk controller for receiving and transmitting second line signaling; and a device processor within a signaling state machine for conducting the first line signaling by executing a first of the

dynamically configurable signaling templates in the memory and for conducting the second line signaling by executing a second of the dynamically configurable signaling templates in the memory, the device processor capable of programming a new signaling template into the dynamically configurable set of signaling templates and to associate the new signaling template with a trunk, the new signaling template association overriding an old association between an old signaling template in the dynamically configurable set of signaling templates and the trunk.

Referring to claim 12, the invention is directed toward a method for configuring a first trunk controller in a network processing device, the method comprising: programming a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk; assigning a name to the new template; associating the name for the new template with the trunk, overriding an old association between an old template and the trunk; determining signaling used over the trunk connected to the first trunk controller; giving the first trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; conducting signaling on the first trunk controller using the new template; conducting signaling on a second trunk controller using a second template in the DCSSM.

Referring to claim 16, the invention is directed toward a method for using a Dynamically Configurable Signaling State Machine (DCSSM) in a network processing device for processing signaling over a first trunk, the method comprising: programming the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the first trunk; assigning a name to the new template; associating the name for the new template with the first trunk, overriding an old association between an old template and the first trunk; receiving the name of the new template representing a signaling; processing signaling over the first trunk according to the new template; and processing signaling over a second trunk according to a second template in the DCSSM.

Referring to claim 20, the invention is directed toward a computer-readable medium containing a program for using a Dynamically Configurable Signaling State Machine (DCSSM) in a network processing device for processing signaling over a trunk, the program comprising: programming software to program the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the trunk; assignment software to assign a name to the new template; association software to associate the name for the new template with the trunk, overriding an old association between an old template and the trunk; first reception software to receive the name of the new template representing a signaling, the

name of the template determined using the signaling over the trunk; and processing software to process signaling over the trunk according to the template.

Referring to claim 22, the invention is directed toward a network processing device for processing signaling over a first trunk using a Dynamically Configurable Signaling State Machine (DCSSM), the device comprising: means for programming the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the first trunk; means for assigning a name to the new template; means for associating the name for the new template with the first trunk, overriding an old association between an old template and the first trunk; means for receiving the name of the new template representing a signaling; and means for processing signaling over the first trunk according to the template and for processing signaling over a second trunk according to a second template in the DCSSM.

Referring to claim 24, the invention is directed toward a computer-readable medium containing a program for configuring a first trunk controller in a network processing device, the method comprising: programming software to program a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk; assignment software to assign a name to the new template; association software to associate the name for the new template with the trunk, overriding an old association between an old template and the trunk; determination software to determine signaling used over the trunk connected to the first trunk controller; giving software to give the first trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; conducting software to conduct signaling on the first trunk controller using the new template; and conducting software to conduct signaling on a second trunk controller using a second template in the DCSSM.

Referring to claim 26, the invention is directed toward a network processing device for configuring a first trunk controller, the device comprising: means for programming a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk; means for assigning a name to the new template; means for associating the name for the new template with the trunk, overriding an old association between an old template and the trunk; means for determining signaling used over the trunk connected to the first trunk controller; means for giving the first trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; and means for conducting signaling on the first trunk controller using the new

template and for conducting signaling on the second trunk controller using a second template in the DCSSM.

In rejecting the claims, the Examiner has previously argued that the motivation to combine Breidenstein and Mergard is that "less protocol-signaling prediction is needed when dynamic configuration is available. The technology taught by Breidenstein et al. is merely older and it would again be obvious to update it with the more flexible dynamically programmable aspect taught by Mergard. The end result functionality of the state machine taught by Mergard is identical to one taught by Breidenstein et al. and so could obviously and easily be implemented in the system of Breidenstein et al."

The Applicant disagrees with this statement. First, as previously argued, Mergard and Breidenstein are not analogous art. For example, the classes and field of search for Breidenstein and Mergard are entirely different: clearly, they are not analogous to the U.S. Patent & Trademark Office.

Second, because the art is not analogous, one skilled in the art would not think to combine Breidenstein and Mergard. The Examiner is using hindsight in his analysis, in that he is using the invention as claimed to suggest pieces that he is using in combination to reject the claims. But a proper obviousness rejection requires the Examiner to "ascertain what would have been obvious to one of ordinary skill in the art at the time the invention was made" (MPEP 2141.03). In other words, the combination must have been obvious to someone who knows nothing about the invention.

Breidenstein has to do with a switching system for interconnecting telephone circuits. In contrast, Mergard is little more than an erasable programmable read only memory (EPROM). Someone skilled in the art would not think to even consider the Mergard reference, or that it could be combined with Breidenstein.

In addition, the Examiner fails to provide a proper motivation to combine the references. According to MPEP 2143, "[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure" (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)). But the totality of the Examiner's motivation to combine the references is that "less protocol/signaling prediction is needed when dynamic configuration is available". This statement provides no motivation to modify the Breidenstein reference: it is merely the Examiner's opinion as to the result that would be expected by modifying Breidenstein. Similarly, the Examiner's statement that "[t]he end result functionality of the state machine taught by Mergard is identical to the one taught by Breidenstein et al. and so could obviously

and easily be implemented in the system of Breidenstein et al.” is conclusory, and provides no motivation to combine the references.

In fact, the Examiner’s suggests that there is no motivation to combine: the Examiner says that “Breidenstein is . . . older and it would . . . be obvious to update it with the more flexible dynamically programmable aspect taught by Mergard”. That Breidenstein is “older” does not give the Examiner carte blanche to combine it with any later available reference, on the premise that Breidenstein did not know about dynamically programmable state machines. There still needs to be some motivation within the references to make the proposed modification. Since the Examiner acknowledges that dynamically programmable state machines were not known at the time of the Breidenstein invention, the motivation needs to come from the Mergard reference itself, as the later reference. But no such motivation has been presented, and Mergard does not provide any such motivation.

In addition, the claims have been amended to describe a single DCSSM as controlling the signaling for multiple trunks using different signaling templates. None of the references teach this. As acknowledged by the Examiner, Breidenstein does not teach programmable state machines, and Mergard teaches only a single programmable state machine, not a device capable of supporting multiple state machines simultaneously. (The Examiner relies on Andruska only for the concept of a system that recalls a default position, and therefore is irrelevant to this analysis.) Furthermore, it is not possible to combine Breidenstein and Mergard to teach a single DCSSM including multiple state machines, as Mergard does not teach a device capable of supporting multiple state machines simultaneously.

It is also worth noting that the claimed invention does not set a limit on the number of signaling templates stored in the DCSSM. Mergard is a hardware invention, and, as proposed by the Examiner, and is adapted to replace a hardware element in Breidenstein. But because Mergard teaches a programmable state machine that can only store a single signaling template, the number of signaling templates in the Examiner’s proposed combination of Breidenstein and Mergard is necessarily limited to the number of adaptations of Mergard applied in the combination. In other words, the combination suggested by the Examiner requires one implementation of the Mergard state machine for each signaling template to be used in the combination. It should be apparent that the number of programmable state machines of Mergard used in the combination with Breidenstein has to be determined at the time the device is assembled, and cannot be changed later without taking the device off-line. Thus, the maximum number of signaling templates that can be stored in the combination of Breidenstein and Mergard is defined by the number of Mergard programmable state machines

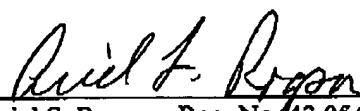
installed in the combination at the time of assembly, and cannot be increased during the operation of the device. In contrast, the claimed invention can support any number of signaling templates: that is, there is no upper bound on the number of signaling templates that can be stored in the DCSSM in the claimed invention at one time. Since the invention provides a capability not offered by the Examiner's proposed combination – namely, that the DCSSM can store any number of signaling templates – the claimed invention is distinguishable from the combination of Breidenstein and Mergard, with or without Andruska.

As the claims all describe a single DCSSM as using different templates to control signaling on different trunks, the claims therefore are distinguishable over the prior art of record. Accordingly, claims 1-6 and 8-41 are patentable under 35 U.S.C. § 103(a) over Breidenstein in view of Mergard and Andruska, and therefore are now allowable.

For the foregoing reasons, reconsideration and allowance of claims 1-6 and 8-41 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

  
Ariel S. Rogson, Reg. No. 43,054

MARGER JOHNSON & McCOLLOM, P.C.  
1030 SW Morrison Street  
Portland, OR 97205  
503-222-3613  
Customer No. 20575